

California Regional Water Quality Control Board
North Coast Region

ORDER NO. R1-2002-0008
ID NO. 1B00096RSON

WASTE DISCHARGE REQUIREMENTS

FOR

SONOMA OAKS
(FORMERLY LAGUNA OAKS VINEYARD AND WINERY)
5700 OCCIDENTAL ROAD
SANTA ROSA, CALIFORNIA

Sonoma County

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board) finds that:

1. Laguna Oaks Vineyard and Winery, Inc., submitted a Report of Waste Discharge (including a \$1,200.00 filing fee) dated December 8, 1999. The report describes the existing sanitary and proposed industrial process wastewater treatment and disposal system for the winery. Supplemental information to complete the application was submitted on June 19, 2000 and May 9, 2001. An amended Report of Waste Discharge was submitted on June 19, 2001 to change the name of the winery to Sonoma Oaks (hereinafter Discharger).
2. The Discharger proposes to construct and operate a new wine production facility in an existing building previously used for vegetable processing and packaging located at 5700 Occidental Road, Santa Rosa, within the Russian River drainage basin. The property is located at latitude N 38° 25' 10" and longitude W 122° 48' 50" within the Sebastopol quadrangle as shown on Attachment "A."
3. The Discharger anticipates production to be 150,000 cases of wine per year. Industrial process wastewater will consist of wastewaters collected at floor drains and trenches within the winery and barrel room, and in exterior receiving, crush, tank and wash-down areas. The Discharger anticipates process wastewater flows will be 4,900 gallons per working day, averaged over a calendar month. During the grape crush however, process wastewater flows will average 10,200 gallons per day and will peak at up to 13,400 gallons per day. No domestic wastewater will be discharged into the process wastewater system.
4. Process wastewater will be collected at a lift station proposed for installation north of the production facility. The lift station will be equipped with dual pumps and an overflow alarm. A flow meter on the discharge side of the lift station will measure wastewater flows conveyed to the treatment facility. Solids will be removed by a rotating drum screen, which is the starting point for gravity flow through the treatment system. Injection points upstream of the first aerated pond will provide a means for flow-paced addition of supplemental nutrients and pH adjustment chemicals to the wastewater if required prior to discharge into a series of four treatment, storage and evaporation ponds (Attachment "B"). The

treatment pond system is proposed to consist of two 150,000-gallon aerated ponds and a 38,000-gallon settling pond arranged for series flow prior to entering an existing 7.822-million gallon storage reservoir. Proposed operation of the reservoir includes storing treated effluent from the process wastewater system and from the Santa Rosa Subregional Water Reclamation System prior to irrigation on surrounding vineyards. Currently the Discharger receives treated wastewater from the Santa Rosa Subregional Water Reclamation System to irrigate on-site vineyards.

5. The Discharger will utilize both drip and overhead irrigation to farm 200 acres of surrounding vineyards. To prevent runoff, no treated wastewater will be applied to the irrigation areas within two days of a forecasted rain event, during rainfall, 48 hours after a rainfall event or when soils are saturated. Irrigation/disposal operations will be routinely monitored to ensure against surface runoff and ponding.
6. Solid waste (pomace, stems, seeds, lees, etc.) from the wine making process will be incorporated back into the vineyard as a soil amendment, on land under the control of the Discharger.
7. Domestic waste collection, treatment and disposal will be accomplished through an existing septic tank/mound system under county permit.
8. The *Water Quality Control Plan for the North Coast Region* (Basin Plan) includes water quality objectives, waste discharge prohibitions and receiving water limitations.
9. The beneficial uses of the Russian River and its tributaries include:
 - a. municipal and domestic supply
 - b. agricultural supply
 - c. industrial service supply
 - d. industrial process supply
 - e. groundwater recharge
 - f. navigation
 - g. hydropower generation
 - h. water contact recreation
 - i. non-contact water recreation
 - j. commercial and sport fishing
 - k. warm freshwater habitat
 - l. cold freshwater habitat
 - m. wildlife habitat
 - n. migration of aquatic organisms
 - o. spawning, reproduction, and/or early development of fish
 - p. estuarine habitat
 - q. aquaculture

10. Beneficial uses of areal groundwaters include:
 - a. domestic water supply
 - b. agricultural water supply
 - c. industrial service supply
 - d. industrial process supply
11. A Mitigated Negative Declaration was prepared and approved by the Sonoma County Board of Zoning Adjustments on April 3, 2001, for the new wine production facility, including the proposed wastewater collection, treatment and disposal system, in accordance with the requirements of the California Environmental Quality Act. The Regional Water Board, as a Responsible Agency, has considered the Mitigated Negative Declaration and has concluded that the project, as proposed with the mitigation measures incorporated as part of the project, will not result in significant impacts.
12. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.
13. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
14. The permitted discharge is consistent with the provisions of State Water Resources Control Board (State Water Board) Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California." The impact on existing water quality will be insignificant.

THEREFORE, IT IS HEREBY ORDERED that the Discharger, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. The discharge of any waste not specifically regulated by this Order is prohibited.
2. Creation of a pollution, contamination, or nuisance, as these terms are defined in Section 13050 of the CWC, is prohibited.
3. The discharge of solid waste to land that is not under the control of the Discharger is prohibited, except as authorized under the section of these Waste Discharge Requirements entitled "D. SOLIDS DISPOSAL."
4. The discharge of untreated or partially treated waste from anywhere within the collection, treatment, or disposal facility is prohibited.

5. The discharge of waste to the Russian River, its tributaries, or any other surface waters is prohibited.
6. The discharge of domestic waste, treated, or untreated, to surface waters is prohibited.
7. The use of treated wastewater shall be restricted to designated vineyards, pastures, or landscape irrigation areas.
8. Treated wastewater shall not be applied to the irrigation areas within two days of a forecasted rain event, during rainfall, 48 hours after a rainfall event or when soils are saturated.
9. The ponds shall be operated and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
10. The ponds shall have sufficient capacity to accommodate wastewater flow and seasonal precipitation during the rainy season.

B. EFFLUENT LIMITATIONS

1. The discharge of treated wastewater to land by spray irrigation or for frost protection shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>Daily Maximum</u>
BOD (20° C, 5-day) ¹	mg/l	80
Settleable Solids	ml/l	1.0
Total Suspended Solids	mg/l	80

2. The discharge of treated wastewater to land by method of drip irrigation shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>Daily Maximum</u>
BOD (20° C, 5-day)	mg/l	160
Settleable Solids	ml/l	1.0
Total Suspended Solids	mg/l	80

3. The mean daily flow of wastewater shall not exceed 4,900 gallons per working day averaged over a calendar month except as provided for in B.4.
4. The mean daily wastewater flow shall not exceed 10,200 gallons per day as averaged over the crush period².

¹ Five-day, 20° Celsius Biochemical Oxygen Demand

5. The maximum daily wastewater flow shall not exceed 13,400 gallons per day.
6. The dissolved oxygen concentration in the treatment/holding ponds shall not be less than 1.0 mg/l at any time.
7. The Discharger shall maintain at least 2 (two) feet of freeboard in the treatment/holding ponds.

C. GROUNDWATER LIMITATIONS

1. The disposal of the wastewater shall not cause or contribute to a statistically significant degradation of background groundwater quality.
2. The storage and disposal of the treated wastewater shall not cause alterations of groundwaters that result in taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

D. SOLIDS DISPOSAL

1. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the State Water Board promulgated provisions of Title 27, Division 2 of the California Code of Regulations or as waived pursuant to Section 13269 of the CWC.
2. Cultivated lands that receive solid wastes from the wine making process shall be managed to prevent ponding, runoff and erosion.
3. During wet weather conditions when solid wastes cannot be incorporated into the soil or hauled off-site for disposal, the solid wastes may be temporarily stored in a designated solids storage area out of the flood plain.
4. The discharge of leachate, from solids storage areas or rainfall runoff, which has come into contact with the solids being stored, to the Russian River or its tributaries, is prohibited.

E. WATER RECLAMATION REQUIREMENTS

1. Reclaimed wastewater shall be managed in conformance with Title 22, Division 4, Chapter 3 of the California Code of Regulations.
2. The use of treated wastewater that results in unreasonable use or waste of the treated wastewater is prohibited.

² The crush period is defined as the time of year during which the facility is processing the seasonal grape harvest. A typical crush period is 60 days in length and may occur from August through November.

3. The use of treated wastewater that creates a condition of pollution or nuisance is prohibited.
4. The Discharger shall be responsible to ensure that all users of treated wastewater comply with the terms and conditions of this Order.
5. Treated wastewater shall be applied in such a manner so as not to exceed vegetative demand or field capacity.
6. The application of treated wastewater shall be managed to prevent ponding, runoff, and erosion.
7. All piping, valves, and outlets shall be marked to differentiate treated wastewater from other sources of water.
8. There shall be no connection between a potable water supply and the treated wastewater distribution system.
9. There shall be no irrigation or impoundment of treated wastewater within 100 feet of any water well.
10. Adequate measures shall be taken to prevent the breeding of insects and other vectors of health significance.
11. Perimeter warning signs indicating use of non-potable water shall be posted at least every 500 feet with a minimum of a sign at each corner and access road.

F. GENERAL PROVISIONS

1. A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel.

2. Severability

Provisions of these waste discharge requirements are severable. If any provision of these requirements is found invalid, the remainder of these requirements shall not be affected.

3. Operation and Maintenance

The Discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the Discharger to achieve compliance with the waste discharge requirements.

4. Change in Discharge

The Discharger shall promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge.

5. Change in Ownership

In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the following items by letter, a copy of which shall be forwarded to the Regional Water Board:

- a. existence of this Order, and
- b. the status of the Dischargers' annual fee account

6. Vested Rights

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from his liability under federal, state, or local laws, nor create a vested right for the Discharger to continue the waste discharge.

7. Monitoring

The Discharger shall comply with the Contingency Planning and Notification Requirements Order No. 74-151 and the Monitoring and Reporting Program No. R1-2002-8 and any modifications to these documents as specified by the Regional Water Board Executive Officer (Executive Officer). Such documents are attached to this Order and incorporated herein. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services.

8. Inspections

The Discharger shall permit authorized staff of the Regional Water Board to:

- a. enter the premises in which an effluent source is located or in which any required records are kept;
- b. have access to and copy any records required to be kept under terms and conditions of this Order;
- c. inspect monitoring equipment or records; and
- d. sample any discharge.

9. Noncompliance

In the event the Discharger is unable to comply with any of the conditions of this Order due to:

- a. breakdown of waste treatment equipment;
- b. accidents caused by human error or negligence; or
- c. other causes such as acts of nature;

the Discharger shall notify the Executive Officer by telephone as soon as the Discharger or its agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

10. Revision of Requirements

This Regional Water Board requires the Discharger to file a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge. The Regional Water Board will review this Order periodically and may revise requirements when necessary.

Certification

I, Susan A. Warner, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on January 24, 2002.

Susan A. Warner
Executive Officer